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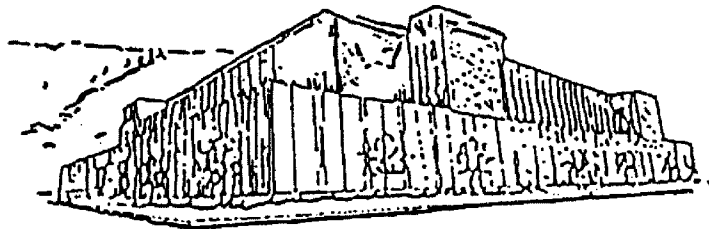
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UNIVERSITY OF MONTANA

ENVIRONMENTAL EDUCATION IN HUNGARY: CONSTRAINTS AND  
LIMITATIONS

BY

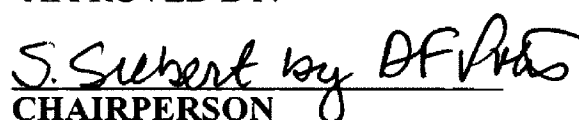
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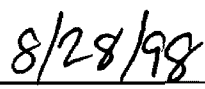
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF

MASTER OF SCIENCE

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## Environmental Education In Hungary: Constraints And Limitations

Graduate Advisor: Stephen F. Siebert

SFS

Since the end of Soviet occupation in 1989, Hungary has undergone profound economic and political changes including decentralization and democratization. Furthermore, Hungary is burdened with serious environmental problems resulting from the policies of a failed governing system. As Hungary continues to follow the western style approach to development and modernization, the excesses of capitalism and consumption are increasingly linked to air and water pollution, as well as, waste management inadequacies. Environmental education efforts have been undertaken to curb environmental degradation, but environmental change in the name of conservation is a slow process that involves a comprehensive understanding of the country's social dynamics.

This paper provides insight into some of the challenges faced when trying to introduce an environmental conservationist approach to economic development. More specifically, it identifies issues inhibiting the implementation of a national environmental education policy. The analysis relies on the experiences and comments of former Peace Corps volunteers and their Hungarian counterparts who were involved with environmental projects. Firsthand accounts of educators and ministry officials were also sampled to identify difficulties in transforming Hungary's education system to meet environmental objectives. Twenty-three Hungarians, 11 American Peace Corps volunteers, ministry officials and program coordinators were interviewed.

Participants of this study reveal that there are four predominant factors that inhibited the successful implementation of environmental education in Hungary: curriculum limitations, economic considerations, and overall attitude of Hungarians and inadequate training of teachers. A political ecology approach is used as a framework for interpreting these results. Ultimately, I suggest that political considerations and special interests exert far greater influence on the outcome of environmental education efforts than does economic or social determinants. By examining Hungary's situation from a political ecology perspective, relevant strategies may be devised to affect positive environmental change within the framework of international collaboration in Hungary.

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## PREFACE

My interest in Hungarian studies and development is grounded in the fact that I am a first generation American/Hungarian and have spent considerable time overseas in the country. From my many visits to Hungary as a young adolescent and from my close ties with family and friends in the country, not to mention being raised in an Hungarian household, I have develop a solid understanding of the Hungarian culture and mentality. Talks on the merits and faults of communism and capitalism have been a reoccurring topic within my family both here in the states and now back in Hungary. At a very early age, I was exposed to communism and its social impacts. I would listen intently to the gripes and frustrations of my aunts and uncles, grandparents and cousins. Ever since my first visit to Hungary back in 1984, I have become acutely aware of the lifestyle and social differences that characterize both the communist and capitalist system. Even before the Soviet decline, I had questioned whether or not westernization in Hungary was the answer to my family and to society's problems. So much of what made living in Hungary so desirable would be lost. Having developed a strong commitment to the ideals of sustainable development over the years, I am convinced that this approach to Hungary's economic development is the most desirable route for Hungarians. In a sense, it can preserve the cultural integrity of the country while making the necessary improvements in social living.

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## INTRODUCTION

Since the collapse of the Soviet Union in 1989, former member bloc countries such as Hungary have begun transforming their entire economic and political order. As a result of restructuring and Western style development, companies have gone bankrupt, people have gone without jobs, new industries have formed, leaders have been replaced, new parties have formed and a new life has begun. After almost nine years, Hungary has a new face. Free market capitalism and privatization have produced modern day conveniences from fast food chains, cash machines, cellular telephones, beepers, household appliances to the latest MTV fads.

After the deprivation imposed by the communist system, Hungary seems to be making up for lost time. In a report to the United Nations Council on Economic Development, a major shift in consumption patterns was noted (Hungarian Commission on Sustainable Development, 1997). Specifically, urban living patterns have become more unsustainable than in the past in the sense that Hungarians are using more energy and generating more waste than ever before. The context in which 'unsustainable' is used in this paper refers to the collective behavior of a society that disregards and ignores negative impacts on the environment as a result of excessive and irresponsible use of its natural resources when environmental friendly alternatives are available.

As the Hungarian Commission on Sustainable Development reported "[t]he deterioration of public transportation, the additional growth of road transport (versus rail transport), the growing amount of municipal waste per capita and the increasing energy use in the residential sector are all adverse tendencies for the environment" (UNCED,

1997). The countryside and city-streets are increasingly littered with such items as plastic bags, styro-foam containers, bottles and other short-life disposable packaging materials. Given an outlook of planned economic modernization, can the Hungarian people balance economic progress with maintaining a healthy environment?

One way to balance these conflicting interests is through environmental education campaigns that inform the Hungarian public on the needs and benefits of continuing their conservationist lifestyles, a lifestyle they unconsciously adopted under communism. Environmental education campaigns have begun in Hungary in attempts by private groups and government to convey the principles of sustainable development and the threats of western style living on the natural processes of surrounding ecosystems. From 1993-1997, the U.S. Peace Corps in collaboration with the Hungarian government, carried out an Environmental Education Program "to expand awareness of threats to the environment and natural resources and their consequences" targeting the thriving business community and growing number of consumers in Hungary (Ralls, 1997). This paper examines the constraints of environmental education projects in Hungary as experienced through American and Hungarian Peace Corps volunteers. A political ecology perspective was taken to better understand their reasoning, the context for their interaction and their contribution to environmental change. The first section of this report provides some background on Hungary and the Peace Corps program followed by a brief explanation of the fundamentals of political ecology thought. The second half of the report focuses on the comments and personal experiences of a sample of American and Hungarian Peace Corps volunteers involved with education and the environment. In the

final section, four major constraints to implementing effective environmental education are revealed along with an interpretation of each.

## **BACKGROUND**

### **Communist influence on the state of the environment**

Shortly after the end of World War II, the victorious Soviet Union imposed a communist order on Hungary. Communist leaders in Moscow commanded the confiscation of private property, the operation of heavy industry (such as fuels, metallurgy, heavy chemicals, machinery and military hardware) and the central management of Hungary's economy (Marer, 1997). For over forty years, the state ignored consumer demands and instead determined what products and services were produced and traded. Prices were also set by the state which "reflected neither world market valuation nor domestic opportunity costs" (Marer, 1997).

Quantitative production quotas ultimately determined industrial output and employment. Much of what was produced was of such low quality that it was virtually unmarketable outside the Soviet bloc (Marer, 1997). Given the perpetual shortage of capital in communist systems, little or no investment in new technologies occurred to reduce industrial pollution. "Little effort was made to minimize inputs of fuels, raw materials and intermediate products" (Marer, 1997). As Dr. Kerekes of the Budapest University of Economic Sciences stated, "[t]he predominance of heavy industry [was] certainly a problem in itself" (Kerekes, 1993). A vicious cycle of subsidizing outdated and polluting factories contributed to the country's environmental demise and economic

decline (Lang, 1991). As the system used up more capital than it was able to generate, Hungary was forced to turn to international financial markets. “During the decade 1977 to 1987 the country’s external debt grew from \$43 million to \$18,957 million” primarily to finance its industrial output and production (Lang, 1991).

The socialist-led economy also compromised the country’s physical and cultural environment. “Financing environmental protection was always dictated by the ‘leftover’ principle,” meaning environmental investments were dependent on the levels of Gross Domestic Product (GDP) for a given year (Hungarian Ministry for Environment and Regional Policy, 1994). Because impacts on the environment were not a significant concern back then, and because it is only a periphery concern today, Hungary now faces a pollution crisis. Thirteen percent of the country’s territory is polluted and almost half of the population lives in these areas (Hungarian Ministry for Environment and Regional Policy, 1997). Specifically, air pollution, solid waste and water contamination are Hungary’s leading environmental problems (Salay, 1990). More than 40% of Hungary’s population is adversely affected by air pollution caused primarily by industry, vehicle emissions and communal heating systems (Hungarian Ministry for Environment and Regional Policy, 1997). The Ministry for Environment and Regional Planning estimate that 25% of persons under age 20 and 11% under 14 suffer from chronic respiratory diseases like asthma (Hungarian Ministry for Environmental and Regional Policy, 1994). Hungary’s base year (1985-1987) carbon dioxide emissions level was about 80 Mt/year of which the residential sector contributed 25% (Hungarian Commission on Sustainable Development, 1997).

With regard to solid waste management, only two to five percent of Hungary's solid waste is recycled, 70 percent is dumped in landfills and 20 percent is unaccounted for (Galai, 1995). Most landfills in Hungary do not meet environmental standards yet they burn close to 300 thousand tons of waste a year (Hungarian Ministry for Environment and Regional Planning, 1994). At the moment, "no uniform responsibilities are defined for waste management and there are no regulatory powers covering the whole waste sector" though an act has already been drafted to make up for this deficiency (Hungarian Commission on Sustainable Development, 1997).

Associated with waste disposal is concern over water quality. "Approximately 54% of the collected waste water is discharged into treatment plants where [only 33% is biologically treated]" (Hungarian Commission on Sustainable Development, 1997). Increasingly, non-biodegradable contaminants have been found in Hungary's surface waters, which exceed the stream's natural self-cleaning functions. This poses a serious threat to the quality of surface and subsurface waters since nearly 90% of the total drinking water demand is met by subsurface water sources (Hungarian Commission on Sustainable Development, 1997). The leaching of pollutants into the groundwater due to the inappropriate use and application of fertilizers and the improper storage of cattle and pig manure also exacerbate water quality problems (Salay, 1990).

"[W]hen the importance of environmental protection was finally recognized, Hungary was already in a period of economic decline and it was not possible to make the big investment needed to replace polluting technologies or the energy intensive and raw-material intensive structure of industry" (Lang, 1991). Thus, the state of the environment

in Hungary can be viewed as a legacy of a failed governing system favoring growth and production at all cost.

### **Capitalist influence on the state of the environment**

The cost of financing growth without taking the proper environmental precautions can induce an environmental backlash. For example, the Nagymaros-Gabcikovo Dam development project would have provided the necessary power to rural Hungarians living along the Danube River and to Szlovaks alike with much left-over power to supply the Austrians, the project's financial investors. However, nearing the final phase of completion, concerns have been raised over the amount of water to be diverted.

The damage could include the drying out of fertile agricultural land on both sides of the Danube; the pollution of the water table, which offers supplies of clean drinking water; the presence of pesticides in the ground water; and air and water pollution, endangering wildlife and fish (Martin, 1991).

At the signing of the contract between the governments of Hungary and the former Czechoslovakia, no environmental impact statement was performed or required resulting in environmental, social and economic conflicts.

These kinds of development projects are common worldwide – projects that forego environmental conservation and protection for short-term economic gain. However, it is the long-term impacts of lifestyle changes in a society, like Hungary, that may stress the environment even more. Indeed, it may be more difficult to change conditioned social behavior, than it is to restore a degraded landscape.

Since 1989, the government introduced development policies to encourage free



enterprise and private investment in Hungary, thereby, marking the beginning of a new form of social conditioning. In 1991, over 5,000 joint ventures were registered totaling approximately \$1.2 billion of foreign capital investment (Okolicsanyi, 1991). In 1993, six Central and Eastern European countries received only \$3.5 billion in direct investment of which Hungary received one-third of the total amount (Berend, 1997). Foreign direct investment for 1997 was estimated at 2.1 billion (Okolicsanyi, 1990). As a result, exports have surged (35% in dollar terms in 1997), fueling overall GDP growth of 4.4% in 1997 (The Budapest Sun, March 1998).

Such investments have taken advantage of Hungary's inexpensive, skilled and available labor force. As a result of this activity, Hungary has experienced some major structural changes, most notably, greater access to imported goods and services; the construction of shopping malls, fast food chains, convenience stores, family homes; increased vehicular use; and the development of new industries and private businesses, etc. Despite these attractions and opportunities, closer examination of the situation reveals some conflicts. In fact, in 1993 Hungary experienced a profound imbalance between its imports and exports with the West: exports decreased by 15% and imports increased by 15% (Ehrlich and Revesz, 1997). Surprisingly, Hungary increased its food imports by 20% and industrial consumer goods by 66% despite a shrinking domestic market and problematic foreign trade deficit (Ehrlich and Revesz, 1997). The concern is over the disproportionate amount of money being spent on business incentives as opposed to environmental investments. Despite Hungary's overall advance in global trade and attractive economic forecasts, protection of the environment and conservation

of natural resources is neither guaranteed nor ensured. In 1993, the cost of environmental clean up [was] estimated at 3%-6% of the GDP but only 0.8%-1% of the country's GDP was allotted for environmental investments (Kerekes, 1993). Despite the fact that an environmental framework has been in place since 1995, including a product fee law and laws on regional development and physical planning, Hungary's environmental legislative framework "does not contain specific environmental standards, punitive terms or enforcement mechanisms" (US Embassy Reports, 1998). Existing and emerging industries are increasingly finding it more profitable to pay pollution fines than to upgrade their facilities and operations to environmentally acceptable standards. Clearly, the management and protection of the environment seems to be obscured by the lure of making money in a growing consumer oriented society.

Analysis of Hungary's new order and embracement of capitalism reveals a lack of public awareness and understanding of development pressures on the environment. However, one Hungarian government officer in Nyiregyhaza did comment that, "the West must recognize that their version of development has also caused much environmental damage and harm; and that it would not be in the best interest of Hungary to follow the same path towards modernization where urban city dwellers are so displaced from their natural surroundings that they abuse its resources" (Zalatnay, 1998: personal communication).

Still, Hungary is faced with a number of challenges that directly impact the environment. People are flocking to the cities in Hungary to find employment or to set up their places of business. Simultaneously, there has been a significant growth in

electric energy use as a result of the increased size of flats and the increased purchase and use of household appliances (Hungarian Commission on Sustainable Development, 1997). More than likely, as the standard of living rises, more and more Hungarians will want to purchase the high energy consumptive items now available in the larger cities. Another challenge environmental conservationist face is the 33% increase in gasoline consumption from the purchase of large foreign made cars and replacement of less efficient eastern cars (Hungarian Commission on Sustainable Development, 1997). Frozen foods and western style packaging of products are also pervasive throughout Hungary, further straining an already weak waste management infrastructure.

Without educational campaigns and appropriate laws in place that draw attention to the principles of sustainable development and the benefits of conservation, Hungarians will find it increasingly difficult to make the connection between modernization and its long-term impacts on the environment. Investments in cleaning up the environment may ultimately cost more in the future if the need is neither fully understood nor valued by society at the present time. Since the United Nations Conference on Environment and Development, great strides have been made by leading industrial countries to advance the principals of sustainable development. Hungary is in a position to capitalize on the experiences of neighboring countries. By recognizing the need for environmental protection and conservation, Hungary could be one step closer to exemplifying 'sustainable development.'

## Attempts To Build Environmental Consciousness

With the abolishment of the one-party system came capitalism and the advancement of democratic institutions allowing for a more pluralistic oriented society and a society allowed to voice its concerns about the environment without fear of persecution. Environmental concerns, though, had been mounting prior to 1989 in response to the Nagymaros-Gabcikovo Dam which eventually culminated in a public protest against the completion of the project. Such dissent helped weaken the communist's stronghold on the country.

“Despite the adverse circumstances, successful initiatives have been taken in several research workshops as well as kindergartens and schools to develop a healthy attitude towards the environment and to work out the structure, requirements and content of environmental education and training” (Benedek, 1991). In fact, non-governmental organizations (NGOs) started to break ground in educating the Hungarian public about the environment as far back as 1990. *Zöld Szív* (Green Heart) is one such organization with 9000 members which develops environmental education programs for children between 6-14 years of age and provides support to educators in acquiring the professional knowledge and instruction methods to carry out its programs. Since 1992, the *Korlanc* Environmental Training Program has been offering environmental workshops and training for teachers as well as producing instructional materials for in-class use. Other organizations such as *E-misszio* and *The Upper Tisza Foundation* in Nyiregyhaza organize workshops and develop place-based instructional materials for teachers interested in incorporating an environmental component into their classes.

Environmental NGOs in Hungary, under the new system, have accomplished much in the name of environmental education and protection. In fact, some NGOs actually operate out of schools, like *Green Heart* and have representatives in government offices, like *E-misszio*. The national parks system frequently holds interpretive workshops about nature for students.

Other NGOs, teacher training colleges and national park headquarters exist that are also involved with this type of work as well (see Appendix A). With the support from the Institute for Sustainable Communities and the US Environmental Protection Agency, a volume of over 50 environmental lesson plans, called *Environmental Education Tips*, has been translated from English to Hungarian and distributed to 23 organizations, libraries and government affiliated offices.

The U.S. Peace Corps has also contributed to building a bridge between the need for environmental protection and the urgency of strengthening the country's economy. However, "it is the lack of appropriate measures in educational policy that chiefly accounts for the fact, that, in spite of numerous good examples, in spite of excellent teaching practices in various places, the efficiency of environmental education in Hungary is still less than satisfactory in the early 90s" (Benedek, 1991). Without the backing from the political and economic community, environmental education efforts will flounder. A proper balance and cooperative effort needs to be established between the national agenda, local economic interests and environmental concerns if the country is to produce an environmentally conscious populace, one that is equipped professionally to adhere to the principles of sustainable development. By turning to those already

acquainted with environmental education efforts and by taking into account the social processes and structures that drive change, a greater understanding of what stands in the way of Hungary's path to 'sustainable development' can hopefully be reached. With a deeper and more grounded understanding, those inspired to make change in the name of the environment can begin to strategize and plan more effectively.

## POLITICAL ECOLOGY AS A THEORETICAL FRAMEWORK

### **What is Political Ecology?**

The Political Ecology perspective drew its initial applications from third world studies in attempts to trace the fundamental sources and links between poverty, social injustices and environmental degradation such as soil erosion, salinization, deforestation, pollution, etc. The approach emphasizes the role politics plays in ecological change and how political and economic practices are in conflict with environmental protection, particularly when the state "tends to lend its power to dominant groups and classes" (Blaikie and Brookfield, 1987). Political ecology prompts us to make the connections between the environment and development, wealth and poverty (Bryant, 1992). It prompts us to explain the different scales of relationship people have with each other, with their constructed environments and their natural surroundings because it helps to identify the root of problems and the manner in which they are solved.

With all the discourse surrounding the concept of sustainable development, acknowledging the political and economic components influencing positive environmental change is critical. "Political ecology focuses on the interplay of diverse

socio-political forces, and the relationship of those forces to environmental change” (Blaikie and Brookfield, 1987). This perspective sheds light on “the nature of the state itself, its structure and historical development, [which] may militate against effective policy action” including environmental educational directives (Bryant, 1992).

In another sense, it takes a nested scale of analysis approach to explaining environmental issues and the reasons ‘why rational appeals by scientists to change our habits and practices in the name of environmental conservation may fall upon deaf ears’ (Blaikie, 1995). It suggests that there are several actors with competing interests that exert influence on the ‘development interface’ level, one being the state and development experts intent on forming public education policy that models international community objectives. In doing so, the state gains favor with the international community thereby gaining economic benefits such as access to markets and trade incentives. The second actor may be local area managers and government officers (mayors) intent on boosting their local economies as a way to safeguard their own careers. A third being actor may be the group of schools and teachers interested in carrying-out the will of the state and in providing public service to the community. And a fourth actor may be the everyday lay person (ie. Parents, students, blue-collar workers, shop owners, etc) intent on securing a better way of life than the generation before them. Political ecology accounts for these actors and their interests as a way to identify sources of policy weaknesses that may induce problems such as income disparities and environmental degradation.

In Hungary, politics is the focal point of the country’s transformation since government is enacting new economic, social and environmental legislation and policies.

The biggest task the newly elected government in 1989 faced was lowering inflation rates and lowering the budget deficit of 53 billion forint (Okolicsanyi, 1990). Only with government interference could the country's economic crisis subside. In 1998, Hungary boasted a 4% decline in inflation to around 14.5% and a growth rate of 4% by the end of the 1998 year (The Budapest Sun, 1998).

The Hungarian government had received numerous proposals for economic recovery, upon which they based their reforms. The government has also received countless reports on the importance of environmental protection in the planning and development of their burgeoning economy. For almost a decade now, the Hungarian government has been well connected with the global community and has become increasingly cognizant of the environmental stakes involved with western style development. No longer are Hungarians and their leaders bound by oppressive forces depriving them of information needed to make positive change. In this respect, the present government is a key player in defining environmental problems and in devising strategies for protecting the country against environmental degradation.

Yet, how government officials view the environment relative to other issues is a matter of politics and special interests. Bryant (1992) suggests that "government and business elite deriving power from processes (e.g. industry, dam construction) often contributing to ecological degradation, are typically ill-disposed toward any changes that may threaten their power." Still, without the regulatory hand of the government, protection of the environment would be virtually non-existent because industry would continue to pass on the cost of environmental degradation to the public thereby allowing



them to increase their profit margins, unarguably a rational, yet morally questionable, decision.

Hungary's new economic policies have produced considerable change. But, the question remaining is whether or not the country as a whole is benefiting and whether or not the environment is more or less at risk? In fact, research studies show that poverty increased as transformation proceeded in Hungary (Andorka, 1995). More specifically, the rich have gotten richer and the poor even poorer (Andorka, 1995). Only a small sector of society has been benefiting from these changes. By 1995, unemployment was up to 35% compared to 10% in the 1980's (Hungarian Commission on Sustainable Development, 1997). At the same time, change in consumer patterns has ignited concerns at the state level over long-term threats to the environment. Awareness at the individual level, however, is slow to adapt.

Piece-meal initiatives have been made in the name of environmental education through state government initiatives and private non-governmental groups such as Emisszio, Zold Sziv and the Upper Tisza Foundation. However, the other actors, such as private business interests to counter the attempts made to sensitize people to the environment. To local area managers, government officers and business elite, economic goals overshadow the much-needed investments in education. Because environmental education is difficult to quantify and assign value to, its importance in the scheme of development is minimized. "Long term investments in environmental protection must compete with more obvious and compelling short-term investments needed to counter the painful aspects of liberalization (unemployment, bankruptcy, heavy debt, etc)" (Kerekes,

1993). And according to Dr. Kerekes of the University of Economic Sciences in Budapest, “the negative experience and day-to-day problems (growing unemployment, existential worries) accompanying the introduction of market relations, [has caused] long-term thinking [to fall] into the background in Hungarian society” (Kerekes, 1993).

### **Using Political Ecology To Assess Environmental Education In Hungary**

Hungary’s modernization strategy considers that “it is not merely the economic and the socio-political system that should be transformed but also cultural life, learning and education” (Hungarian Ministry of Culture and Education, 1997). The Hungarian school system has undergone profound changes during recent years, keeping pace with the national goal to reform its economic and political systems. In 1995, Hungary released its National Core Curriculum (NCC) which provides greater autonomy to local schools in administering curriculum and instructing students. The 1996 Amendment to the Education Act of 1993, requires “comprehensive updating and improvement of teacher training, the development and running of up-to-date education evaluation and control systems, the evolution of a state examination system, and a classification of higher standard curricular programs, etc.” (Hungarian Ministry of Education and Culture, 1997).

Basically, the state has prescribed what students should learn in the schools but allows the schools and teachers to decide how subject material will be delivered within the framework of central programs and regulations (i.e. time restrictions and program requirements). The NCC encourages teachers to pay more attention to the way students learn and acquire knowledge. “From the teacher’s perspective, this trend [means] that in

everyday pedagogical work, one [has] to concentrate less on actual [lecturing] and more on managing and organizing the learning process” (Hungarian Ministry of Culture and Education, 1997). The Ministry also establishes a system of compulsory in-service teacher training and specialist examination initiatives to assist schoolteachers in meeting the goals of the National Core Curriculum. At the same time, the current Education Act ensures 3% of the school education budget to be reserved for such programs while the national budget for school education is roughly 5.6% of GDP.<sup>1</sup>

One objective of the NCC is to incorporate environmental education in the classroom covering topics ranging from the effects of pollution on global climate change to the effects of deforestation on water pollution and poverty. The context in which environmental education is referred to involves heightening the awareness and understanding among Hungarians about the life-sustaining functions of their natural resources and how they are negatively affected by development pressures, associated industrial activity and consumer life-styles. Despite the state’s commitment to integrate environmental education in the schools of Hungary, “the nature of the state itself, its structure and historical development, may [weigh] against effective policy action” (Bryant, 1992). We need to challenge the assumptions made by government in enacting new educational policies and in sponsoring public education campaigns and curriculum development workshops.

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<sup>1</sup> Another significant step towards reform occurred on March 4, 1998, when the Minister of Culture and Education, Balint Magyar, signed a World Bank/IBRD (International Bank for Reconstruction and Development) loan worth 150 million (USD) to overhaul the country’s higher education system. The financial package is to fund such projects as investment and development, the acquisition of management information systems, the development of management skills and the introduction of student financial loans. “So far, this is the greatest loan the IBRD has allocated in the region to develop education” (Ministry of Culture and Education, 1997).

One assumption made by governing officials is that the present standard of education can be maintained by changing only part of the system – the way teachers deliver information in the classroom. Such a policy further assumes that teachers will automatically start to change their pedagogical approach to teaching with or without the proper incentives in place (i.e. modifying or changing the testing standards for college entrance exams).

A lower standard of education would be politically disconcerting to those in power. At the same time, ministry officials fulfill the country's obligations to the international community in promoting environmental awareness - a win-win situation for the governing elite. However, with this new educational system in place, much of the accountability is shifted to the local level of schools and teachers. If the new system succeeds, the government is credited for making the change. On the other hand, if the system fails, then the schools and teachers are blamed because they were assigned the responsibility of educating the students.

And lastly, this policy assumes that changing the curriculum to include environmental education will be enough to educate the Hungarian populace to solve their own environmental problems, if, in fact, this is an objective. Indeed, Hungary's objective might just be to fulfill EU membership requirements, which include having environmental topics as an integral component within the national curriculum disregarding other elements or components of the system that may need adjustments for the program's success (i.e. testing standards, aptitude tests, etc.).

With these issues in mind, a more clear understanding of the difficulties

Hungarians are having in trying to implement environmental education can be reached. Rather than merely blaming individuals who are acting in response to and accordance with socially constructed systems, the political ecology approach alerts us to factors outside the relative control of the individual that can affect the outcome of environmental related policy initiatives. In other words, the political ecology perspective allows us to go beyond the individual to explain conflict and to pinpoint a context for behavior within social systems like government and economics. Such an approach sheds light on the problem and offers new avenues for remedying the situation.

## THE U.S. PEACE CORPS ENVIRONMENTAL EDUCATION PROGRAM

The United States Peace Corps officially began its environmental education program in Hungary in 1992 to address growing concerns about the declining environmental conditions in the country. There were basically two Peace Corps programs that dealt with the environment entitled the *Environmental Protection Project* and the *English Language Teaching and Environmental Awareness Project*. The main purpose of the projects was to increase environmental awareness, to educate the public about preventative approaches to environmental protection and to support systems that conserve the natural areas in Hungary (U.S. Peace Corps, 1995). The projects were designed to introduce Hungarians to new ways of doing things including management techniques and to share with them the depth of information the American volunteers had with respect to the environment and development. American and Hungarian volunteers would also learn about each other's culture and mind-set. The Environmental Protection

Project involved volunteers who worked with local non-governmental organizations, municipalities and schools in coordinating environmental awareness campaigns and in preparing environmental assessment reports.

Environmental education was on the Peace Corps agenda almost immediately after its inception in 1990.<sup>2</sup> By 1992, English teachers were offering courses to train environmentalists and professionals in the field as well as leading summer camps focusing on the environment. Environmental education became a special emphasis of the TEFL (Teachers of English as a Foreign Language) program. Volunteers began spending their summers coordinating English-language summer camps utilizing the outdoors as classrooms. Throughout the Peace Corps' seven-year presence in Hungary, 250 volunteers were assigned to English Language Teaching and Environmental Awareness projects.

Through content based language teaching volunteers introduced students to social and environmental issues and facilitated the development of problem solving skills necessary for dealing with these issues. They also developed and implemented English language programs for Hungarian environmentalists who needed English to participate in international [conferences as a means] to solve environmental problems (Kaszas and Ralls, 1996).

At the close of the Peace Corps program, a total of 14 environmental awareness and education campaigns had been created and 1 pilot project in environmental education started at a teacher training college (Deri, 1994). Peace Corps Volunteers had been

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<sup>2</sup> The acquisition of English competency and skill, however, was far greater in demand. In Hungary, English proficiency offered better jobs, pay increases and professional advancement for the Hungarian individual. "A greater English-speaking population increased the possibility of joining the European Economic Community" (Ralls, 1997).

established NGOs, built networking channels, conducted environmental studies, led teacher training workshops, published newsletters and magazines and coordinated events such as tree planting days, Earth days and trips to the nature museum (Ralls, 1997). Program Directors attributed the successful implementation of these projects to volunteer patience, cultural sensitivity and demonstrated ability to persevere in light of social, political and economic constraints (Peace Corps, 1995).<sup>3</sup> However, the scope of this paper tries to identify the institutional constraints of bringing environmental awareness in the daily lives of Hungarians through the educational system in attempts to curb the rate of environmental degradation associated with uncontrolled development and resource consumption.

## **Methods of Analysis**

In order to identify possible factors inhibiting the implementation and effectiveness of environmental education, the personal experiences of American and Hungarian Peace Corps volunteers involved with environmental projects were reviewed. The assessment involved the compilation and examination of documents produced by the Peace Corps, Hungarian government agencies, and educational facilities. I also collected information through interviews with both former Peace Corps Volunteers (PCV) and

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<sup>3</sup> Pre-Service Training sessions were fundamental in preparing the trainees for duty. These sessions were developed to challenge volunteers' own perceptions of environmental problems while providing a platform for discourse on how the North American perspective differed from host country nationals' perspective on nature and the environment. The Peace Corps' philosophy on constructive change and influence highly depended on recognizing the influence of host country nationals' perspective on project development and implementation (Burnett, Reynolds and Shaw, 1990). "During their first quarter of service, volunteers were not required to begin any type of project outside their primary assignment, but rather to put energies into adjusting to and becoming familiar with their new communities and workplaces...As they learned more about their community, volunteers investigated areas in which projects might eventually resolve a need" (Ralls, 1997).

their Hungarian counterparts. First, I gathered Peace Corps Project Status Reports and official summary documentation to determine the agency's objectives for environmental education and the extent to which they were reportedly achieved. From these reports, I generated a list of 34 names out of the 250 volunteers to contact who either served as environmental educators or advisors and who lived in either Budapest or Nyiregyhaza. These two cities represent the regions in the central and northeast parts of the country that are seriously polluted and where active environmental education programs exist. Other cities included Cegled, Kecskemet, Hajduszoboszlo and Satoraljaujhely. I purposefully chose these cities because they were relatively near to where I would be staying with family. The study sample does not represent any one sampling method and therefore the results can not be generalized to the general population of Hungarians teachers. However, they can serve as possible indicators for further research and study.

Because the Peace Corps was not allowed to divulge the phone numbers or addresses of any of the volunteers, I conducted a search on the Internet for the 33 volunteers assigned to the English Language Teaching and Environmental Awareness Program I had chosen. I, then, sent out multiple letters of inquiry to those names posted with e-mail addresses. A total of 11 volunteers responded to my e-mail inquiry stating that they were in fact the people I was looking for and that they would be willing to cooperate. Out of the 11, three volunteers were interviewed by phone and eight by correspondence. Five volunteers served specifically as English as Second Language (ESL) teachers and six as environmental specialists (See Table 1). Three volunteers had some form of environmental education background, four had English language teaching



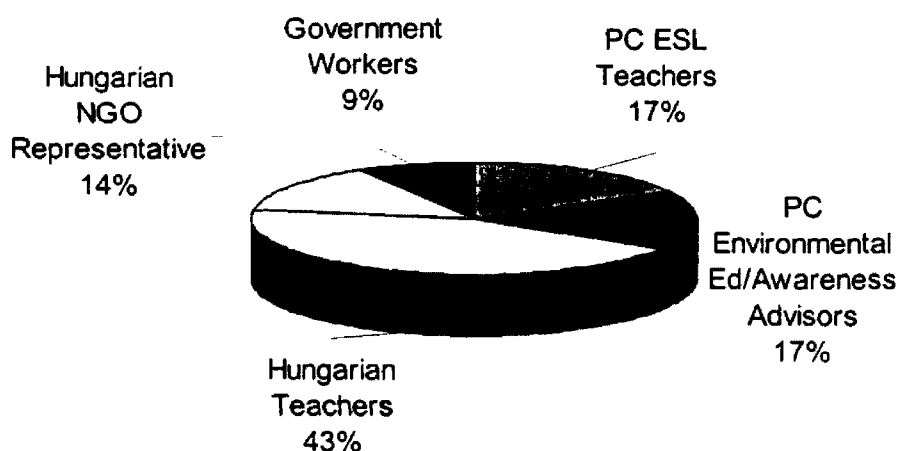
credentials and the others had professional backgrounds in urban planning, management, and environmental consulting. With their cooperation, I was given the names, addresses and phone numbers of their Hungarian counterparts. I mailed letters of introduction to these Hungarians prior to my arrival in Hungary. Follow-up calls were made and letters sent out while in Hungary to secure meeting times and places.

I succeeded in interviewing 23 Hungarians who were associated with the Peace Corps, 15 of which were secondary school English teachers, three of which were involved with NGOs and five of which were associated with either national or local governments (See Table 1 and Figure 1).

**Table 1: Breakdown Of Interviewees By Profession**

Peace Corps ESL Teacher	6
Peace Corps Environmental Education/Awareness Advisor	5
<b>Total Peace Corps Volunteers</b>	<b>11</b>
Hungarian NGO Representative	3
Hungarian Government Worker	5
Hungarian English Teacher	15
<b>Total Hungarians</b>	<b>23</b>
<b>Total interviews</b>	<b>34</b>

**Figure 1: Percentages of Interviewees by Profession (n=34)**



In addition, I also discussed the present economic, political and social situation in Hungary with family and friends to gain greater insight into what life was like in Hungary though their comments were not tabulated in the final results. To avoid bias in what my relatives and friends may have told me, I cross-referenced their stories with the Hungarians involved in my study. Most interviews were conducted in Hungarian to allow the interviewee the freedom to express themselves.

Each interview began with a brief explanation of my research interest and purpose for my study. I then posed questions about their personal experiences working with Peace Corps volunteers on environmental projects. The most common questions asked were:

1. What were some of the hardships you encountered trying to carryout some of the projects the Peace Corps wanted to promote?
2. Were environmental projects successful? Why or why not? In what way?

3. Was there any environmental education taught in the schools prior to the Peace Corps? If so, what was the content of environmental education?
4. How receptive were students to environmental issues such as air and water pollution and waste management?
5. Is there sufficient and available educational material to teach ecological concepts?
6. What are your thoughts on teaching environmental education in the schools?
7. Do you think environmental education is an important subject to be addressed in the schools?
8. What are some of the constraints and limitations to heightening people's awareness about environmental concerns?

The responses of each interviewee were recorded on tape, transcribed and filed separately. After reviewing the tapes and notes, I began to identify some common themes among people's responses. I then highlighted those comments that were repeated more than once. Most interviewees mentioned more than one factor influencing the success/failure of environmental education programs. Therefore, I created four general categories for those responses that were repeated more than once.

## **Results and Discussion**

The interpretation of the results relied heavily on the commonality of responses made by both Americans and Hungarians involved in the study group. Ultimately, I identified four key factors that members in the study group attributed to obstructing environmental education in Hungary. Fifty-six percent attributed curriculum restrictions, 50% faulted financial and time constraints, 47% associated Hungarian attitude and mentality while 41% claimed teachers lacked the proper training in alternative methods of instruction (see Figure 2).

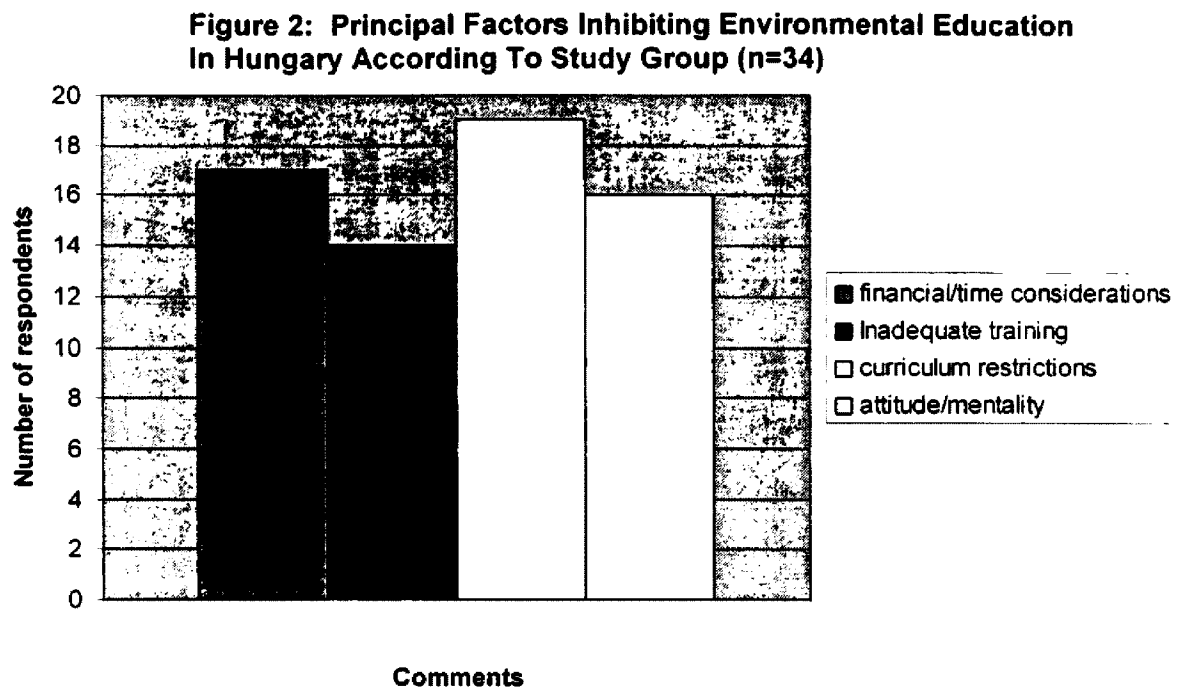


Table 2 denotes the percentage differences between American (PC) and Hungarians (HU) responses and, to some extent, it demonstrates how people from different political, social and economic backgrounds perceive things differently. For example, the table reveals the highest percentage of Americans attributed the negative attitude of Hungarians as the major constraint whereas the highest percentage of Hungarians attributed financial and curriculum limitations.

Table 2: BREAKDOWN OF RESULTS BETWEEN AMERICANS VS HUNGARIANS

(n=34)

Profession	Economic Considerations	Inadequate Training	Curriculum Restrictions	Attitude
Hungarian Government Worker (5)	3	4	3	3
Hungarian NGO Representative (3)	2	2	0	1
Hungarian Teacher (15)	9	7	10	6
Total # of HU interviewees	14	13	14	10
Percent HU	61%	57%	61%	44%
Peace Corps Environmental Advisor (5)	2	1	2	2
Peace Corps English Teacher (6)	1	0	3	4
Total # of PC interviewees	3	1	5	6
Percent PC	27%	9%	45%	55%
Total	17	14	19	16
Total %	50%	41%	56%	47%

Note: Each interviewee mentioned more than one constraint

### Curriculum Limitations

The most frequently cited issue obstructing new environmental education initiatives was the structure of the existing curriculum and school system. Nineteen interviewees perceived the existing core curriculum as an obstacle to teaching environmental topics in the classroom. They claimed that the required curriculum did not leave sufficient space or time for teaching environmental subject matter, particularly in the college preparatory schools. They also argued that environmental education would take away valuable study time from core subjects that students need to prepare for college entrance exams. General education high school teachers also expressed their displeasure and rejection of the revised National Core Curriculum (NCC) because they felt it was yet

another command from above that neglected to solicit their input and neglected to take the learning capacity of students into account. Some teachers also questioned the relevance of environmental topics in the NCC when there was no indication that testing standards had changed to reflect the new content of the curriculum.

“The NCC comprises objectives to be enforced in every school in Hungary. These objectives contribute to the uniform and even prevalence of basic educational content in every school type. By this way, it aims to promote the indispensable unity of contents as well as to allow students to change to a different school type” (Hungarian Ministry of Culture and Education, 1996).

One of the changes involves reducing the number of minutes for instruction in all of the subject areas to make room for environmental topics such as the ones listed in Table 3.

Table 3: EXAMPLES OF TOPICS SUGGESTED IN THE NEW NATIONAL CORE CURRICULUM

TOPIC	GRADE	KNOWLEDGE/SKILL
From Local Community to the World	4	List the valuable natural resources of the region
The Physical Geographical Landscape	6	Know the environmental conditions of the air, water, soil and land surfaces
Continents–Regions–Countries	8	Know the effects on nature by economic activities, regional environmental activities and environment management
General Characteristics of Living Communities	8	Able to argue for the importance of protected areas and against behavior that pollutes and destroys the environment Know the significance of natural communities in the maintenance of life on Earth.
Civics	10	Know possible regional answers to global problems

Reference: *A Guide to the Hungarian National Core Curriculum, 1996*

However, the amount of material for each subject would remain the same placing even greater pressure on general education high school students (Ulrich, 1998: personal communication). Teachers of general secondary schools feared that without changing the testing standards overall student performance on college entrance exams would be reduced (Gaal, 1998: Personal communication). As one Peace Corps Volunteer stated, “if the national testing standards don’t change, the teaching methods can’t change. If you don’t change the teaching methods, new concepts, priorities and problem solving skills can not be introduced” (Hamby, 1998: personal communication). Further investigation is needed to determine exactly how students would be evaluated. At the moment, the NCC offers no clear directives. It merely lists the knowledge and skill students are expected to acquire as a general goal.

On the other hand, teachers of secondary vocational schools were concerned less with this issue because their students were not preparing for such demanding tests. They seemed to embrace the opportunity to develop new specialized programs focusing on environmental management. This was the case at schools in Cegled and Kecskemet, which offered specialized training in environmental protection and environmental economics.

Hungary’s school system is characterized by a variety of secondary school types ranging from general secondary, professional (technical/vocational) to special apprenticeship schools. Higher education includes university studies for master’s degrees, colleges for bachelor’s degrees and higher vocational training for advanced certificates. General secondary schools are the dominant school types, which prepare

students for higher education at the university level. Professional schools in Hungary offer technical and vocational certificates while the special apprenticeship schools only offer specialized courses similar to internships or on-the-job training.

This system was established to carry-out the vision of the previous governing system which was to produce skilled workers to fill the numerous jobs needed to keep the communist run industries operating. "Specialization was the accepted norm. It was safe and it secured one's future" (Gal, 1998: personal communication). Because the system stressed knowledge and information acquisition over the processing and application of that information, students were not trained to come up with novel approaches needed to solve complex problems. Consequently, the education system under the direction of the communist regime produced managers that were trained to take orders rather than to solve problems. One Hungarian teacher bluntly stated that "a major problem is that the system does not teach our students how to think or to use their brains creatively" (Ungvari, 1998: personal communication).

Hungary's education system was also "in the form of central curriculum regulation which used to determine in detail the ideological and educational goals, tasks and materials of teaching, the teaching subjects and the number of lessons as well as pedagogical activities' close adherence to school types and structures" (Hungarian Ministry of Culture and Education, 1996). In other words, curriculum development was centralized and one-sided with little room for local modification. Although some reforms were issued in "the fields of developing goals, content, requirements and in strategy building" even these modest changes were centrally motivated leaving little incentive for



local educators to offer suggestions or to make recommendations (Hungarian Ministry of Culture and Education, 1996).

According to a former Peace Corps Country Director for the Environment, the educational system today still seems to be under ministerial control despite the introduction of the National Core Curriculum allowing local schools to develop their own curriculum and despite attempts at unifying the objectives of the different school types (Karas, 1998: personal communication). The state has made its agenda quite clear by complying with international appeals to restructure its education system. It has changed the curriculum to reflect efforts at promoting an environmental consciousness. However, there has been little dialogue with regards to changing the standards by which students are tested and evaluated to determine the extent of their environmental knowledge and skill. Rather, more attention is paid to the advancement and training of English proficiency among students in general education high schools. In fact, "English represents the opportunity for the Hungarian individual. With English, better jobs are attainable, pay increases are available, professional advancement possible" (Ralls, 1997). Not surprisingly, English out-competes environmental education for class time and resources as requirements for English language exams become increasingly demanding.

From a political standpoint, changes to the NCC seem politically motivated in that the move to decentralize control over curriculum development mirrors the objectives of the international community. However, the state has retained control over curriculum content by establishing guidelines schools must follow. By deferring to dominant interests involved with international trade, Hungary has moved closer to gaining

membership to the European Union, a strategy to gain favorable trading relations with member countries – all in the interest of boosting the country's exports. By making only piecemeal changes that are unsupported structurally at the local level, teachers and environmental advocates will continue to fight a losing battle. Political ecology highlights the needs and interests of the minority and gives political voice to teachers and students who are calling for structural changes in the system to include modifications of testing standards. Such changes would relieve the stress both the teachers and students experience while closing the interest gap between the different groups and classes.

### Economic Considerations

The second most commonly mentioned factor obstructing environmental education among those sampled was financial concerns. Half of the interviewees related that a lack of money and time prevented them and their students from getting involved with environmental projects such as Earth Day events, field trips, re-training workshops, etc. Hungarians pointed out that often times these projects were simply too expensive for their schools to support. In many cases, the cost of class material, textbooks and field trips was more than the schools could afford. A teacher from Cegléd admitted that “catalogues were available from which to order materials and books, but his school could not afford them” (Mezo, 1998: personal communication). Covering the cost of registration for teacher-training workshops was also a problem some of the teachers faced. Money was perceived to be in short supply.

Consequently, financial shortcomings placed pressure on teachers to write

proposals and to solicit funding on their own free time despite their full work schedules. A high-school teacher from Cegled applauded her principal's efforts to inform the staff of available grants for environmental projects, but few teachers actually had submitted anything (Gyore, 1998: personal communication). In addition, grants were believed to target strictly the Budapest area. Therefore, rural teachers were discouraged from submitting proposals (Dudas, 1998: personal communication).

A look into Hungary's economic and political profile offers insight to the nature of this situation and an explanation for this observation. According to current economic trends, Hungary is doing unexpectedly well. Economic forecasts predict that the Hungarian economy will expand considerably [in 1998] to around 4-5% GDP while inflation rates are expected to decline by 4% to around 14-14.5% (The Budapest Sun, 1998). Exports increased by 21% in 1997 and imports by 16% according to the Ministry of Industry, Trade and Tourism (The Budapest Sun, 1998). Foreign trade deficit also was down \$403 million from 1996 figures (The Budapest Sun, 1998).

So, why then are teachers laying blame on financial shortcomings? Despite quantitative changes in the state's economy, the benefits are not equally shared by all sectors of society. In fact, "the already privileged strata in the state socialist system has become even more privileged, while the underprivileged strata of the state socialist system have become even more underprivileged" (Andorka, 1995). Because teachers fall into the category of fixed income earners, it is quite common in Hungary for them to have second jobs, such as teaching private English lessons, to supplement their income. With commitments to two jobs, it is no wonder teachers can not find the time to engage

in environmental projects that are under-funded.

Yet, often times the individual becomes the culprit or scapegoat for structural processes and the roadblock for development. Blaikie writes that it is vital to understand the life world of all actors in the 'development interface' including those actors determining power structures because the way in which these structures are interpreted defines the rational for individual behavior that may very well be environmentally unacceptable (Blaikie, 1995).<sup>4</sup>

In light of statistics on educational spending, the perceived lack of funds by both volunteers and Hungarians could be explained by the intent of local government servants to spur economic activity rather than to spend money on educational purposes. Local government officers are one type of actors in the 'development interface' as are state politicians whose main intent is to demonstrate Hungary's efforts at fulfilling international community education policy objectives.

Since 1989, state government and local municipalities have been transformed. The most profound change being that of decentralization and transferring responsibility and accountability to local governing bodies. Today, local officials are in a position of executive authority and financial responsibility. They are held accountable for the disbursement of resources originating from the central state budget, local government taxes and business fees, the National Fund for Vocation Training and grants offered through different ministries for specific educational purposes.

However, the concept of accountability never truly existed under the communist

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<sup>4</sup> The 'development interface' as defined by Blaikie is the stage on which actors (including development experts and everyday lay people) perform or enter into social relations.

system, not even at the highest levels of government. "Communist managers spent their working lives either as paperpushers or as 'fixers,' an unofficial activity without which central planning would have collapsed" (Lenches, 1993). In other words, city managers rarely exercised any decision-making authority. Communication between staff and managers was minimal. The role of staff and personnel was never defined and therefore work performance plummeted (Kovatz, 1998: personal communication). Today, as a consequence, local leaders are experiencing "an element of uncertainty...on how to function" considering they must now give orders and exercise discretion over public spending. Far greater emphasis is placed on city managers to be financially profitable than to be environmentally sensitive. This is important to point out because schools are supported by central and local public funds that these city managers oversee.

The structural changes that occurred in the last decade assume that previous public managers are skilled and qualified to function in the new system. Yet, many do not have money management or public administration backgrounds to deal with some very complex issues nor the interdisciplinary training to recognize and address environmentally related problems or their financial implications. Because more control is transferred to municipalities, local civil leaders must now deal with the social ills plaguing their communities on their own: unemployment, health, crime, maintenance and reconstruction of roads and buildings, waste management, etc. No longer can they rely on the state for direction. They must now make their own decisions. Because these concerns require money, local leaders are reluctant to support projects that can not be monetarily quantified. Instead, city managers are more willing to invest their time,

money and energy into projects that generate immediate financial returns.

It is argued that there is only the perception of insufficient funds and that managers undervalue the benefits of environmental projects because they are in direct competition with projects that generate revenue for the city. This is indicative of two different actors in the 'development interface' and two different values and objectives they hold. To illustrate this point, the following scenario is presented. A vocational secondary school in Cegled requested an increase in their budget to employ a grant coordinator responsible for raising money to support their new environmental education program. School administrators believed that such a position was necessary to free up teachers to do what they do best...teach. Teachers would also be given more incentive to supplement their lessons with environmental information if they were supported financially and if there was some kind of infrastructure in place (Toth, 1998: personal communication). Unfortunately, local authorities denied the school's request claiming that there was no more money left in their budgets to spend on hiring additional personnel for the schools. A more accurate interpretation of comparative spending could be made if management records were made accessible to the public for scrutiny. However, this is almost impossible considering there does not seem to be a system in place as of yet and considering complete management records may not even exist.

In Satoraljaujhely, a new city manager (mayor) was instated a few years ago who discontinued funding for a city employee who taught environmental studies to pre-schoolers. According to this individual, "the manager believed [her] work was unnecessary" (Geczi, 1998: personal communication). Today, she works for the City

Water Works, Ltd. where she encourages teachers and their students to take trips to the plant to learn about water treatment and management.

As suggested previously, political ecology offers insight into the true nature of Hungary's financial situation which is not so much a lack of funding as it is the value managers place on the benefits gained by funding environmental education projects as opposed to development projects. From this perspective, the collective response of both American and Hungarian volunteers is justified given their limited scope of analysis of the situation. However, political ecology proposes that historical political and economic circumstances are factors influencing managers in their decision making process because social conditions essentially shape and form the context in which individuals make their decisions. Therefore, the fine line determining advances in environmental education is more a factor of how institutional processes and structures are interpreted and related to by individual in power.

### Negative Attitude and Mentality of Hungarians

The third most frequently mentioned constraint to environmental education among the people interviewed was the negative and defeatist attitude of individuals in a position to influence positive change. Sixteen people indicated that pessimism among their co-workers was a major deterrent to promoting environmental awareness. Many Hungarians claimed that cynicism prompted them to question whether their efforts could somehow influence others and improve their situation. As one Peace Corps volunteer put it, "the cynicism and pessimism were the main drags – the individual (Hungarian) had no

reason to feel empowered to make positive change” (Hamby, 1998: personal communication). Often times, community leaders rejected new projects in fear of change, failure and accountability. One Hungarian NGO representative claimed that “people need proof that new ideas [would] work” (Zalatnay, 1998: personal communication).

Again and again, people expressed to me feelings of dismay and disillusionment about their past and future in Hungary. Uncertainty and powerlessness seemed to abound. From public opinion polls, “...Hungarians are very dissatisfied with their income level, their standard of living, and the general economic and political conditions in the country” (Andorka, 1995). According to one author, “[Hungarians] are hindered in [their] efforts mainly by factors of a deep rooted attitude, over and above the prevailing economic conditions” (Benedek, 1991).

The former communist government in Hungary was authoritative by nature and inhibited individual initiative and civil mobilization. This closed system affected three generations of Hungarians in three different ways and thus shaped their present outlook on life. I know from my own personal experience relating to family and friends in Hungary for over 20 years that the older generation of Hungarians between the ages of forty and sixty are skeptical of the new government because they know government is capable of lying, covering-up and deceit. One teacher recalled the time of Chernobyl and the weeklong delay by government forewarning the people not to consume certain foods that were contaminated by radiation (Pipicz, 1998: personal communication). “Although communism has apparently been discarded and overcome... its legacy lives on in the



minds and souls of its people and stands in the way of real change” (Lenches, 1993). The disgust expressed by the teacher over how the government handled the situation was overwhelming. Clearly, each generation under communism was confronted with a different set of circumstances and pressures that influenced their reaction and response to today’s conditions.

In the case of the oldest generation (40-60yrs), “[t]he men, women and children emerging from communism carry a heavy mental legacy; they are helpless, disoriented, and totally unprepared to cope with the new circumstances which require them to assume personal responsibility for their own fate” (Lenches, 1993). This generation was raised under a false sense of security in that they were led to believe that the state would provide for their well being including free health care and free education.

Overall, this generation was the most indoctrinated by Marxist and Leninist traditions and thought, yet it was the most familiar with its shortcomings and failures. Ultimately, they were forced to live its ideology and were forced to accept the Soviet Union as their paternal figure. Whatever the central committee in Moscow dictated, the satellite states carried-out without dissent, though, undoubtedly with reservation. Information and news was censored to avoid conflict and to maintain the status quo. Any dissatisfaction and frustration Hungarians might have felt was diffused amongst themselves. In addition, the intrusive nature of the communist system denied rights to self-expression and self-determination, crushing hopes and dreams for self-fulfillment and personal achievement. As students, many were deprived of the right to choose between different majors (Lenches, 1993). Instead, those affiliated and committed to the

Communist party were offered far more choices in their career goals.

No formal venues for public dissent existed. When opposition to the Soviet occupation was voiced in 1956, Soviet troops were quick to quell further dissent. In no time, Hungarians' civil rights were stripped away compounding their sense of powerlessness. Today, ideals of democracy and capitalism prevail. Citizens are now expected to comply with the basic principles of capitalism with which they have no formal experience. But with the ever-growing gap between the rich and the poor, it is difficult to arouse support for and trust in new policies. The failure of the system in general was a relief and burden at the same time for this generation (Kaufman, 1997). Hungarians were not conditioned or trained to take action or incentive. "Many Hungarians, because of their recent experience with a system where all decision making power rested with central authority, lack[ed] the practice and confidence to do [or take action]" (U.S. Peace Corps, 1995).

The second generation, between 20-40 years of age, also grew-up under the wing of communism and, from my experience, was more vocal in their criticism than the previous generation. I would often hear cousins of mine (at age 16) rage about inflation rates and the accelerating prices for staple foods during my regular summer visits to Hungary. They made sure that I was aware of the strain and hardship their parents (my aunts and uncles) faced just trying to survive. They knew their parents' work and performance was undervalued, yet, could not do much about it. They also made me aware of accelerated inflation rates and the absurdity of waiting several years for a Lada car or telephone.

By the time they graduated from college, the Soviet Union had already collapsed. This generation seemed anxious to adopt any form of government that was not so oppressive. They were now in a position to make choices and to determine their own fate. The increase in cultural exchange and information flow appeared to fuel the expectations and demands of this generation. Because they were less indoctrinated and were still young, they were more aggressive and ambitious in their personal goals. Still, they carry with them the frustration of not being able to get ahead and vent incessantly about the cost of living even today.

The third generation (1-20 years of age) affected by Hungary's past is the one now growing up during the transition period attending primary and secondary schools, colleges and universities. In one sense, they have no solid orientation or philosophical background. Socially, they don't belong to any one school of thought. Though capitalism and democracy now prevail, questions are being raised about its legitimacy and practice. Hungarian adolescents are like sponges absorbing all that is presented to them without criticism. The country as a whole has yet to fully recover from the psychological impacts caused by the communist system (Lenches, 1993). And therefore, the youngest generation of Hungarians will have to fend for themselves and filter through the competing ideologies in search of truths that make up the pillars of a healthy society. At the same time, "[t]hey are left without guidance in a moral and spiritual vacuum" (Lenches, 1993).

In order for environmental education to flourish in Hungary, the attitudes and mentality of these three generations of Hungarians need to be taken into account and

acknowledged separately. More importantly, their opinions need to be voiced and heard. The political influence on the psyche of the individual is essential to understanding the Hungarian mentality and the reasons for disinterest in environmental affairs. It is important to stress this level of analysis to ensure that the most appropriate and politically effective approach is taken when trying to bring about change to a country like Hungary. The vision of today's leading political figures is not quite compatible with the vision of the proceeding generation who are now becoming leaders themselves. Focus on reconciling the attitudes of these two generations is important for the nurturing of subsequent generations to follow.

### Inadequate Training

A final point refers to teacher training. Fourteen of the 34 individuals questioned believed that teachers were unprepared and untrained to deliver and present environmental education in the classroom. One teacher from Budapest commented that teachers are specialized in only one field of study and therefore find it difficult to integrate environmental material into their classrooms (Vagvolgyi, 1998: personal communication). From other research papers, Hungarian authors have concluded that "[Hungarian] teachers do not possess the kind of sound pedagogical and ecological knowledge they need to transmit information efficiently or to fully take advantage of possible curriculum content and teaching methods" (Benedek, 1991). This is an important point considering the success of Peace Corps projects was determined by how well Hungarians could adopt and carry-on the work the volunteers started. This remotely suggests, then, that the Peace Corps' Environmental Education Program was not as

successful as it claimed to be in their final report.

The communist ideology had a profound influence on the evolution of the Hungarian education system. Under communism, little, if any, training of teachers to develop their own curriculum and to exercise new methods of instruction was fostered, much less to encourage critical thinking of the education system itself and the ideology upon which the system was built (Hungarian Ministry of Culture and Education, 1996). From 1948 to the early 1960s, communist ideology prevailed as “a sort of totalitarian order, which later changed into a slowly disintegrating authoritarianism” over all aspects of society, even education (Kochanowicz, 1995). It wasn’t until the 1970s, that education in Hungary engaged curriculum theory that emphasized the development of goals, content, requirements and strategies (Hungarian Ministry of Culture and Education, 1997).

By the mid 1980s, schools began to experiment with curriculum development and local curriculum regulation, but the evolution of advanced techniques for learning about the surrounding world was still dormant (Hungarian Ministry of Culture and Education, 1997). Teacher training colleges, too, continued to emphasize content knowledge over modifying learning process to include hands-on and cooperative learning methods (Karas, 1998: personal communication). In this way, the government equipped the masses with information but it was government that decided how that knowledge was to be used. Training fell short of preparing prospective teachers to think critically and to develop their own curriculum according to the specific needs of each learner (Vagvolgyi, 1998: personal communication). It also did not consider the individual or human

dimensions of learning (Szep, 1998: personal communication).

Ultimately, this form of teacher training translated into in-class instruction that was very unidirectional. In other words, the system was teacher and content focused with very little interactive communication between the student and the teacher. Educators were not trained to identify how learners learn, the role of learners and leaders during instruction and the selection of instructional methods. They were not taught to teach how to solve problems either. All problem solving was left up to the central government at the time.

When Peace Corps Volunteers were present, they took a learner center approach and practiced active learning whenever possible.<sup>5</sup> Most of environmental education that took place occurred outside the classroom in the form of projects, like coordinating Earth Day events, planting trees, collecting garbage, recycling, testing pollutants in nearby streams, plays and even protesting places of business, etc. English communication was an integral part of learning about the environment and was a major advantage for American Peace Corps volunteers over their Hungarian counterparts, who were English teachers themselves.

According to some Hungarian teachers, these projects were very time consuming and required a lot of creativity and ingenuity (Gyore, 1998: personal communication). A teacher from Hajduszoboszlo admitted to using active learning techniques but could not elicit the same enthusiasm or response from her students as her American counterpart

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<sup>5</sup> The learner center approach "treats the learner, rather than the content, as the central focus of the instructional process" (Environmental Education Council, 1994). During active learning, students physically interacted with real objects and their surroundings. Water samples were taken from nearby streams to measure nitrate levels, trees were planted and nature walks taken to identify birds and plants.

could. In addition, she claimed that it took away precious class time from other subjects (Gaal, 1998: personal communication).

Despite the fact that teachers lack the proper training in environmental studies, Hungary is widely known for its knowledgeable populace that is well versed in history, literature, math, poetry, politics, science, and speech. A change in approach to education may change all this considering more time would be spent on methodology than on the expansion of student's knowledge base.

Concerns about teacher training are justified given Hungary once pursued communist objectives under a carefully crafted education system that is now under modest reconstruction to accommodate the objectives of the new state. As one teacher already stated, "the NCC seems too interdisciplinary for teachers conditioned in the old system" (Gal, 1998: personal communication). But, there are changes being made to address this very issue. In fact, the Act on School Education (1996) has guaranteed 3% of the school education budget for in-service training which would introduce the teaching community to new concepts and methodological skills (Hungarian Ministry of Culture and Education, 1997). Unfortunately, it has not been determined whether this figure is sufficient to relieve the financial burden of teachers in covering the cost of registration for retraining workshops.

According to one teacher from Pomaz, there undoubtedly seems to be strict competition for funding (Dudas, 1998: personal communication). There is also no guarantee that local city managers will actually disburse the funds allocated for retraining purposes. As mentioned before, these governing agents are now motivated to

act in the financial interest of the city and not necessarily to the whim of the state. The interdisciplinary approach to teaching and studying (a factor in environmental studies) will continue to remain a foreign concept to both Hungarian teachers and students alike if re-training workshops and programs are not made accessible (Gal, 1998: personal communication).

Each actor and their relation with one another, according to political ecology thought, contributes to how successful or unsuccessful (accessible/inaccessible) re-training programs will be. At the moment, re-training efforts have been shortsighted in that the needs and interests of the teachers have been neglected. To receive partial financial assistance, teachers are encouraged to attend workshops outside their normal working hours, a way to reduce the cost of substitution fees. This already poses a problem for teachers who work two jobs and are already overburdened by the amount of material they must prepare for classes each day of the week. Clearly, the financial constraints and time limitations these teachers face seem not to factor into the decision-making process at the state level.

But the state has already targeted teachers as the vehicle for environmental education. Economically, it is cheaper to enlist teachers for the task because they are already getting paid for their services. An author on the subject of education in Hungary states that “in the long run, it is incumbent upon the teachers, mainly technical teachers to [introduce] the students into the ways and means of protecting the environment” (Benedek, 1991). But, the objective of re-training teachers to become environmental educators while at the same time ensuring the maintenance of current standards of



education is almost irreconcilable. In a sense, teachers would be expected to be both the generalist and specialist. Is this really what the new system will demand and is it reasonable to expect this from teachers?

To relieve the high expectations placed on teachers, the state could turn to another sector of society that is already experienced in carrying-out the task of environmental education. Environmental NGOs have emerged to provide a new source of educators that are familiar with and trained in environmental education. They are, in fact, other actors in the 'development interface' that need to be recognized especially for their potential contribution to the cause of educating the public about the link between development and environmental degradation. NGOs like *E-misszio*, *Korlanc*, the *Upper Tisza Foundation* and *Zold Sziv* all provide environmental education instruction from a learner centered approach to both students and teachers.

One explanation why government has not turned to environmental NGOs is because they may be protecting their political interests and control over the direction of the country. Governing elite may fear the power these NGOs may gain if their membership continues to expand. With an increase in membership, NGOs have greater political voice which governing elite will have to contend with.

All in all, if government was to delegate more of its tasks and assignments to NGOs, environmental education objectives could potentially be achieved with greater efficiency and expediency. In this way, the content and teacher centered approach to learning could be preserved while producing an environmentally educated populace able to address its environmental problems. These two distinct kinds of teachers would be

able to uphold the traditional pillars of the previous education system, one concentrating on content and the other on the learner. New ground could be broken in the area of human development and environmental education in Hungary.

It seems that the political interests of the state continue to dictate the manner in which environmental education is carried out in Hungary. The voice of the teachers and NGOs has not been equally weighted in comparison to the voice of regional and international interests, otherwise, more financial support for re-training initiatives would be evident and more tasks would be delegated to NGOs.

## CONCLUSION

It is not clear whether Hungary is pursuing environmental education as part of an evolutionary environmental consciousness resulting from the need to clean up its own backyard after years of neglect and mismanagement or as a result of external negotiations benefiting dominant groups and classes. What is clear, is the influence Hungarian politics has on shaping the environmental consciousness of its people through structural entities such as the education system. The state has passed legislation calling for an overhaul of the education system and curriculum. NGOs have formed to work with teachers and students on building environmental awareness that values economic development with natural resource conservation and protection. But without recognizing the needs, concerns and values of the different group of actors involved, Hungary's environmental predicament may worsen and environmental objectives may not be achieved. In the long run, Hungary's future may be compromised merely for short-term

political gain by a small privileged class.

The presence of the United States Peace Corps and the volunteers serving as environmental educators, advisors and managers in Hungary helped influence the way environmental issues were conveyed and taught to Hungarians both in the schools and in everyday life. Hungarians witnessed different approaches to teaching, to interacting and to working. But there seems to be some inherent conflicts in the way environmental programs have been carried out. From the personal experiences of Peace Corps Volunteers and their Hungarian counterparts, the most frequently mentioned constraint was the rigidity of the existing curriculum, followed by economic and time constraints, a negative attitude among Hungarians and a lack of teacher training. These results are important considering the Peace Corps has already withdrawn its program from the country claiming to have successfully trained enough Hungarians who could continue the work of its volunteers. Apparently, five years of Peace Corps influence was not enough for long lasting results. In this respect, political ecology explains that there will always exist opposing political forces to environmental interests and without recognizing the power of these forces, environmental education will never truly reach the mainstream.

These four factors suggest that further research needs to be done in the areas of testing standards, the management of public funds in sponsoring teacher re-training workshops, the social conditioning of the Hungarian people and the contribution of NGOs in teaching environmental education. By interpreting these factors from a political ecology perspective, the political forces influencing the development of environmental education are exposed igniting greater debate and discourse over public policy. In this

way more effective planning of nation-wide programs can be developed that incorporate the needs and values of different socio-political groups.

For instance, one approach might be for ministry leaders and NGOs to work hand-in-hand to develop the structure, requirements and content of environmental education leaving the instruction solely up to NGOs during the transition period. Funding for NGOs could come from the education budget creating a market for environmental educators. In this way, teachers of the old system are not physically and emotionally drained by new job responsibilities and they can continue to focus on preparing their students for college entrance exams as they have in the past.

Financial support of teacher training colleges that promote environmental studies programs could also be increased to ensure the supply of environmental educators for NGOs. A dual education system can be established as a way to bridge the gap between the progressive vision of the state and the reactive tendencies of the people who ultimately determine the relative outcome of public policy. Greater strides in environmental education can be achieved if the plurality of interests are addressed and accounted for when developing and devising national policy. Acknowledging these differences in a growing pluralistic society may spur greater cooperation between social sectors as well as prompt more creative and tailored solutions to Hungary's environmental problems.

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# Appendix A

## EE-TIPS RECIPIENTS (23) IN HUNGARY

### LIBRARIES

<b>Green Library</b> Information Center for Community Culture	<b>Zöld Könyvtár</b> a Független Ökológiai Központtal és a Körlánc Irodával együttműködve	<b>Ernszt Árpád</b> <b>Mács Ildikó</b> 1035 Budapest, Miklós tér 1 Tel: 250-0420 Fax: 1688-002 <konyvtar@kia.hu>
<b>Library of Hungarian Parliament</b>	<b>Országgyűlési Könyvtár</b>	<b>Tomcsányi Zsuzsanna</b> 1357 Budapest Pf 3., Kossuth tér 1-3. Tel: 268-48-59 Fax: 268-48-53 <fl0tomcs@mkogy.hu>
<b>Library of Regional Environmental Center for Central and Eastern Europe</b>	<b>Közép- és Kelet-Európai</b> <b>Környezetvédelmi Központ könyvtára</b>	<b>Ilkei Csilla</b> <b>Ivelin Roussev</b> 2000 Szentendre, Ady Endre út 9-11. Tel: 06-26-311-199 Fax: 06-26-311-294 <rec-info@rec.hu>

# NGOs

Hungarian Association for Environmental Education	Magyar Környezeti Nevelési Egyesület	<b>Dr Vásárhelyi Tamás</b> <b>Darvas Kati, Albert Jutka</b> 1088 Budapest, Baross utca 13. Tel: 333-06-55 Fax: 250-15-46
Göncöl Foundation	Göncöl Alapítvány / Oktatóközpont	<b>Brauer László, Nagy Judit</b> 2600 Vác, Ilona utca 3. Tel: 06-27-314-983 Fax: 06-27-311-179 <postmust@goncol.zpok.hu>
Green Heart Youth Environmental Movement	Zöld Szív Ifjúsági Természetvédelmi Mozgalom / Oktatóközpont	<b>Orgoványi Anikó</b> 2013 Pomáz, Mátyás király út 2. Tel: 06-26-325-957 Fax: 06-26-325-957
National Association of Environmental Education Centres	Környezetvédelmi Oktatóközpontok Országos Szövetsége Természet- és Erdővédelmi Oktatóközpont	<b>Szentendrey Géza, Néder Kati</b> 2025 Visegrád, Pf. 47. Tel: 06-26-397-430 Fax: 06-26-397-430

Ormánság Foundation Ormánság College	Ormánság Alapítvány Ormánsági Szabadiskola	<b>Luspai Gabi</b> 7625 Pécs, Mecsek utca 2. Tel: 06-72-329-897 Tel: 06-72-352-159 Fax: 06-72-329-897
Diószegi Sámuel Forest Culture House	Diószegi Sámuel Erdei Művelődés Háza a Hortobágyi Nemzeti Parkkal és a Kölcsey Ferenc Tanítóképző Főiskolával együttműködve	<b>Dr Csapóné Tábori Hajnalka</b> 4043 Debrecen, Kartács utca 25. Tel: 06-52-319-599 Fax: 06-52-319-599

### TEACHER TRAINING COLLEGES

ELTE Teacher Training College	ELTE Tanárképző Főiskolai Kar	<b>Dr Victor András</b> 1055 Budapest, Markó utca 29. Tel: 132-21-77 Fax: 112-2024
Kecskeméti Teacher Training College	Kecskeméti Tanítóképző Főiskola Körlánc Kecskeméti munkacsoport	<b>Dr Hári József</b> 6000 Kecskemét, Kaszap u. 6-14. Tel: 06-76-321-444 Fax: 06-76-483-282

Berzsenyi Dániel Teacher Training College and Institute of Pedagogy of Vas County English Teaching Resource Center	Berzsenyi Dániel Tanárképző Főiskola	<b>Szűcs Mária</b> 9700 Szombathely, Berzsenyi tér 2. Tel: 06-94-310-526 Fax: 06-94-310-527 <hica@fsd.bdtf.hu>
Juhász Gyula Teacher Training College Propagulum Education Center	Juhász Gyula Tanárképző Főiskola, Biológia Tanszék CSEMETE Körlánc Szegedi munkacsoport	<b>Dr Illosvay György</b> <b>Dr Kincsek Irén</b> 6725 Szeged, Boldogasszony sgt. 6. Tel: 06-62-456-073 Fax: 06-62-310-953 <H8147sza@ella.hu>
Eger Teacher Training College	Eszterházy Károly Tanárképző Főiskola Egry Környezet- és Természetvédelmi Oktatóközpont Körlánc Egri munkacsoport	<b>Dr Kárász Imre</b> 3301 Eger, Leányka utca 6. Tel: 06-36-412-399/ext 4168 Fax: 06-36-412-399/ext 4206 <karasz@gemini.ektf.hu>
Nyíregyháza Teacher Training College Department of Environmental Science	Bessenyei György Tanárképző Főiskola	<b>Vallner Judit</b> 4401 Nyíregyháza, Sóstói u. 31/b. Tel: 06-42-402-488 Fax: 06-42-402-605 <vallnerj@nyl.bgytf.hu>
Janus Pannonius University Teacher Training Institute	Janus Pannonius Tudományegyetem Tanárképző Intézet, Pedagógia Tanszék	<b>Huszár Zsuzsanna</b> 7624 Pécs, Ifjúság útja 6. Tel: 06-72-327-622 / ext 4010

		Fax: 06-72-327-622/ ext 4003 <huszped@btk.jpte.hu>
Veszprém University	Veszprémi Egyetem	<b>Dr. Kiss István</b> 8201 Veszprém, Egyetem u. 10. Tel: 06-88-422-022 /ext 435 vagy 436
Pázmány Péter Catholic University Department of Environmental Studies	Pázmány Péter Katolikus Egyetem	<b>Dr Zlinszky János</b> 1088 Budapest, Szentkirályi utca 28. Jogi Kar, Dékáni Hivatal Tel: 138-41-61 Fax: 138-46-40 / ext 123

### NATIONAL PARKS

Kiskunság National Park	Kiskunsági Nemzeti Park Fülöpháza Regionális Oktatóközpont	<b>Gilly Zsolt</b> 6000 Kecskemét, Liszt F. utca 19. Tel: 06-76-482-611 Fax: 06-76-481-074
Aggtelek National Park	Aggteleki Nemzeti Park	<b>Újvárosi Antal</b> 3758 Jósvalő, Pf 6. Tel: 06-48-350-006 Fax: 06-48-350-006

# MINISTRIES

Ministry for Education and Culture	Művelődési és Köznevelési Minisztérium	<b>Dr Dunai Gábor</b> Budapest 1055 Szalay utca 10-14. Tel: 302-2001, 331-4364 Fax: 332-9180
Ministry for Environment and Regional Policy	Környezetvédelmi és Területfejlesztési Minisztérium Személyügyi és Oktatási Főosztály	<b>Dr Száraz Péter</b> 1011 Budapest, Fő utca 44-50. Tel: 457-35-12 Fax: 201-49-37

# US EMBASSY

Embassy of the United States of America	Amerikai Nagykövetség	<b>Andrew Bock</b> 1054 Budapest, Szabadság tér 12. Tel: 267-4400 Fax: 269-9326
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